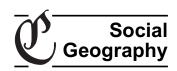
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# Visual geographies – an editorial

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#### 1 Why visual geographies?

The use of image-processing procedures and techniques and their products - photographs, aerial photographs, satellite images, maps – and the application of GIS and GPS, so-called "geomatics" (Thornes, 2004:787), are taken for granted in academic geographical practice today. This practice involves the development and adaptation of cartographic and visual material as well as the application and communication of geographical knowledge in a non-textual way. Technical developments in both hardware and software mean that visual representations can be created, reproduced and edited with comparative ease (Thornes, 2004). However, there is a certain imbalance between this progressive habitualization to the use of visual materials and the paucity of related critical reflection. In contrast to the "fundamental visual disciplines" (Sachs-Hombach, 2005:14)1 such as philosophy, psychology, cognition studies, communications science and art history, which explicitly study the typology, use and functions of images, geography has so far produced practically no systematic attempts to develop a visual theory. Geography is primarily a discipline that uses images. Indeed: "It sounds almost trivial to point out that geography is a quintessentially visual enterprise" (Sui, 2000:322). Hitherto, geography's visual approach to the world and its attempts to develop a clear picture of reality, seem rather to have inhibited epistemological reflection on visuality and visualisation (Tuan, 1979; Rose, 2003). Thus images and visuality could prove to be a geographical blind spot for the very reason that they play such a prominent role in geography.



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This blind spot is becoming increasingly evident in the context of the broad interest in visual theory that has formed around the current pictorial turn (Mitchell, 1992) and/or iconic turn (Boehm, 1994, see Sauerländer, 2004 for a critical view). This interest is shared by geographers. The practices of and conditions for creating and using geographical visualisations are increasingly discussed under the heading "visual turn" (Rose, 2003, 2004; Thornes, 2004). This is not so much an expression of a new interest in images, visuality, or, more generally, sensory perceptions, because these are virtually constitutive of the subject. Instead it is a manifestation of the attempt to deal critically and reflectively with geographical visualisations, as well as to take into account the significance of visuality in the constitution of spatio-temporal realities.<sup>2</sup> This special issue of the journal Social Geography dedicated to "Visual geographies" brings together a series of contributions on the relationships between space, images and society; most of them are based on papers given at a conference on "Visualisation of space –producing, presenting, profiling" which was held at the Leibniz Institute of Regional Geography in 2005. The conference was hosted by the Leibniz Institute of Regional Geography together with the Social Geography section of the Department of Geography at the University of Jena. At the time there was a growing interest in the analysis of issues of visuality in geography, the formulation of research questions and perspectives and theoretical perspectives that could possibly be useful for geography. A systematic analysis of associated issues has not yet been carried out, nor does this editorial claim to do so (even if it were

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<sup>&</sup>lt;sup>2</sup>This in turn may be due to a more urgent general interest in visualisations. The concepts "visualisation" (*Visualisierung*) and "to visualise" (*visualisieren*) only appear in popular German dictionaries published after 1990. The dictionaries attribute the terms with connotations that extend beyond the merely physical act of seeing, explaining "to visualise" as meaning "to illustrate" and "to picture", and both terms are now used to describe a broad spectrum of visual representations (Großer, 2007:80–83).

possible). However, an initial examination of the issues identifies two central, linked foci which should form a starting point for reflection on visual theory in geography.

#### 2 Orientations of geographical visual reflections

The visual products of purposeful academic activity in particular must be viewed critically in the context of the themes and results of geographical research. Our interest focuses on the image as a "planimetric transformation" (Meder, 2006:197) and as an artefact derived from the production of geographical knowledge. Visual products are understood as instruments for the production of knowledge about the world, and their presentation follows disciplinary techniques, conventions and codifications (see Großer, 2007, on the semiotic rules of cartography). Accordingly, visualisations in cartography and GIS, photography and remote sensing are "means to the world" and facilitate the practical orientation, organisation and co-ordination of actions, and are also characterised by a high claim to validity: Created in the mode of science, they supposedly represent true knowledge about the world. In the context of this mode of production and reception their visual character, their visuality, is easily overlooked and habitually denies itself. This calls for a willed breaking through of supposed evidence, as well as critical reflection considering the perspectivity, directedness and selectiveness associated with material images. Viewed critically, these are not an image of the world but are powerful means to create worlds (see Schelhaas/Wardenga, 2007). Their effects call for ongoing theoretical analysis, which should take into account modes of visualisation and their production practices, and not merely the contents of images (Anderson, 1998; Harley, 1989; Gugerli/Speich, 2002; Tzschaschel et al., 2007). Although cartographic products are only mentioned in passing here, it should be borne in mind that maps in particular, which "pin down" the material manifestations of social practices in an objective and apparently uncircumventible manner, are visual media that facilitate the production and fetishizing of space and disguise the causes of spatially manifest(ed) phenomena in order to merely illustrate them (e.g. see Belina, 2007). Producers and interpreters are equally involved in a production of space that they usually perceive as unavoidable, "natural" and "obvious". It is essential to make the underlying logics of spatialisation and their effects transparent.

A second focus for reflection can be seen in the context of the general turn towards the analysis of everyday practices of "doing geography" on the part of social and cultural geography (Werlen, 1995, 1997, 2007). This perspective is less concerned with the scientific production of images, or more generally, visualisations, and more with socialised man as an "image-producing creature" (Wiesing in Sachs-Hombach, 2004:153). If practices of the constitution and appropriation of spatio-temporal realities are to be the central

focus of interest, the instruments and forms of expression of these processes of constitution and appropriation need to be identified. In recent years there has been much discussion of the fact that spaces are produced through the means of language and communication, and that geographies are created by systems of signs and symbols and as representations (for the German discussion see for example Felgenhauer, 2007; Miggelbrink/Redepenning, 2004; Schlottmann, 2005). Although images as signs differ considerably from the sign system of language (Michel, 2006:56; see also Boehm 2007), they are obviously also both means and products of everyday spatial structuring, although they have received relatively little attention so far. What, then, is the specific significance of images for everyday spatial structuring? And what is the nature of the "spatiality" thus constructed? To what extent can visual forms of presentation be traced back to (hegemonial) structures similar to those of language-based discourses (see Maasen et al.)? Are images ontologically available to analytical, scientific observation (and therefore also capable of being used in a controlled methodology)? Are the acts of speaking and viewing, i.e. sayability and visibility, comparable in terms of their underlying rationalities (see Renggli, 2007)? Or: are images events whose relation to reality is no longer comprehensible and is not subject to logic, as posited by Baudrillard or Derrida? At least different or additional theoretical instruments and methods seem to be necessary in order to do justice to the special nature of the visual. At the same time there is a need for substantial theoretical and empirical work to identify and specifically define the epistemological content of the visual for human geographical research, as has also been suggested for the social sciences (Bohnsack, 2007). However, the type of image being used must be taken into account – a simple transfer of art history image analysis approaches (Imdahl, 2001) to the analysis of images for practical use such as maps or advertising photography is destined to fail because of their different conditions of production and the specific nature of their artistic and graphic design. More than ever before, images are subject to "diffusing practicalities" (Meder, 2006:106).

Mere sensitisation to the use of images in geography and by geography is therefore not sufficient. A conceptual approach is necessary, less to produce an independent geographic theory of images than to define the concept and significance of images and visuality in the context of social geography research. How can existing strands of theory in human geography address the visual, its subject and objects, in a productive manner (Driver, 2003; see also Bal, 2003)? Which of the many existing image definitions can be useful and productive for issues in social, cultural or political geography? And what set of concepts can aid geographical reflections on the visual?

#### 3 Images as the subject of geographical research

In recent years some theoretical and empirical geography publications have addressed the issue of visuality. The German-speaking discourse – apart from perception-theory or phenomenological approaches to landscapes and landscape aesthetics (Hasse 1993, 1999) - often consisted of writings that reflected themes discussed in English-language publications. Cosgrove and Daniels' volume of essays "The iconography of landscape" (1988), for instance, has had a lasting influence on the recent German landscape discourse, and it established the visual nature and symbolic construction of spatial reality as subjects of research for human geography (see also Binder Johnson/Pitzl, 1981, for a contribution in German). The work of Urry (1995, 2002) has also been widely read and reflected upon with regard to the culturality and disciplining of the (tourist) perception of landscape. In recent years the "geography of film" has become established as an independent field of research (Aitken/Dixon, 2006), and the earliest publications in this field also largely originate from English-speaking countries (Kennedy/Lukinbeal, 1997; Cresswell/ Dixon, 2002; see also Matless, 1997, for an overview). In the German-speaking discourse Escher and Zimmermann (Escher/Zimmermann, 2001; Escher, 2006; Lukinbeal/Zimmermann, 2006) and most recently Fröhlich (2007) have made substantial contributions to the development of this field.

A significant element of the geographical image concept that appears in this discourse is the relationship between the image or its perception, and the object portrayed, which is interpreted as being "geographical" per se, i.e. as constituting "space" (Bollhöfer, 2003) or "landscape" (Escher/Zimmermann). We will return later to this central aspect of the object-oriented definition of "geographical images", with its many inherent preconditions. To start with, however, the concept of the image must be specified. If we look at the theoretical, conceptual level, the underlying visual concepts are seldom explicitly defined in geographical studies, and are even more rarely the subject of separate publications. The situation in related disciplines such as sociology, philosophy, media studies and politics is quite different, and the visual concepts commonly used there will have to be tested for their applicability to geographical issues (see Sachs-Hombach, 2005, 2006). This is also desirable because many of the social theorists to whose work social and human geographers refer, have explicitly addressed the consideration of image theories (e.g. Bourdieu, 1974; Husserl, [1904/05]1980; Luhmann, [1995]1999; Merleau-Ponty, 1966). Hence, how might a geographical concept of the image for our times be expressed? What aspects of the image theory debate could be used for this purpose and what is their relevance for geographical studies? In the following we will concentrate on three aspects: firstly, a classification of images with a view to determining the object of a conceptual definition in terms of image theory, secondly the problem of representation and its specific geographical interpretation, and thirdly pragmatic considerations associated with "doing everyday geography".

#### 3.1 "Mental", "material" and "linguistic" images

A fundamental distinction can be made between mental, material and visual images (Müller 2003:20; see also Flitner, 1999:171). Sachs-Hombach and Schürmann (2005:110), who list a total of five image concepts in philosophy, differentiate between "internal" and "external" images and add a further category of "linguistic" images (metaphors) (see also Stöckl, 2004). Metaphors have been studied in geography for quite a long times (Marcuse, 1989, 2005; Smith/Katz, 1993; Merrifield, 1997; Schoenberger, 1998; Schlottmann, 2005; Miggelbrink/Meyer zu Schwabedissen, 2005; Micheel/Meyer zu Schwabedissen, 2006, 2007; Denzer, 2007) and they are a significant element of so-called "post-dualist" research (Thrift, 1999). Metaphors are based on visual registers, and apart from supposedly unambiguous juxtapositions of the material and the semiotic, of pictorial everyday language and analytical academic language, the authors' concern is with the significance of images for the organisation of knowledge, as in the case of the "obligatory fractal image of the Mandelbrot set" to enable us to imagine "complexity" (Thrift, 1999:37). The extent to which metaphors should be taken into account as linguistic images in the framework of a geographical image concept is largely dependent on their position in the scheme of mental and material images. The metaphor in particular raises the question whether similarity theories or, rather, network theories of meaning are reasonable approaches (Stöckl, 2004; Debatin, 1995). Böhm explicitly asks which insights into the metaphorical characteristics of language can be transferred to a consideration of images and, presupposing that it is in principle possible to differentiate between metaphor and image, cites some characteristics of metaphor that could be useful for an understanding of the way in which images function (Böhm, 2001:27): their performative significance in rhetoric, the scepticism with which they are considered as a type of "knowledge-threatening disease" (ibid.), their function as a paradigm of the aesthetic as well as their role in the history of thought, and finally their inherent resistance to any attempts to normalize them (ibid.:28). Geographers seem to be very acquainted with the differentiation between mental, material and linguistic images as these image concepts mark areas that have (hitherto) mostly been dealt with separately: the spiritual, the physical and the cultural. However, the relationships between these image types have been little discussed so far; the ontological and epistemological premises of their differentiation and their possible relationships are subject of an ongoing debate (see Sachs-Hombach, 2006).

#### 3.2 On the problem of representation

A further strand in the fundamental theoretical debate on language and images is the concern with "representation" in the sense of correspondence between a reality that is immanent to the image/illustration and a real point of reference outside the image system. Concepts diverge depending on their underlying social theory and epistemological premises. While the independence and arbitrariness of signs are emphasised in the post-structuralist mode, media theory approaches concentrate on a similarity theorem, especially when they emphasise the manipulative character of images, i.e. the way in which they "distort" reality . In the image theory discussion, part of this problem is discussed under headings such as "degree of similarity" and "iconicity". According to Morris (1973) iconicity is described as "the degree of similarity between an iconic sign and its object of reference" (Michel, 2005:57). This discussion is focused on the question "whether images refer to reality, as they are similar to reality" (Michel, 2005:57; see Sachs-Hombach, 2006:129ff.). The relationship between the sign and its external reference is therefore not picked out as a central theme, but it is assumed that there are conventionalised effects of similarity (Eco, [1972]1994:200ff.), based on an amalgam of conventionalised design elements and the viewer's experience of similarity (Michel, 2005:59).

In a constructivist perspective this relationship is turned around to concentrate on the generative and structuring effect of images. Fellmann suggests a stronger focus on the significance of visuality for the production of reality and, instead of determining the relationship between image and reality by assuming similarity, he gives primacy to visuality. Starting from the question whether visuality plays a central role in our "elementary appropriation" of the world, i.e. in perception (Fellmann, 1998:187), Fellmann presents a semiotic concept of the image concept by defining images as a special class of signs, distinct from traces and words, and understands them as "emblems" [Wahrzeichen]. Such emblems, sights such as the Eiffel Tower, for example, fulfil a double claim to truth: they are true in the sense of accurate or right depiction, in that they portray a real scene, and they are true in the sense of their significance, which – in the case of the Eiffel Tower - mediates the underlying idea of "Paris". Rightness and significance are effects of the syntax of an image, which Fellmann presumes has priority over the semantic aspects of the sign process. In terms of syntax, he presumes that visuality demonstrates a fundamental correspondence with perception, because an image shows a view of something (which does not exclude abstract images) and this view does not resemble the object but rather the perception of the object; the view corresponds to "visual experience" and "optical impression" (ibid.:190). At the same time, the perception differs syntactically from the image, because the view is separate from the object. A view ultimately becomes an image because it is "isolated from spatio-temporal reality" (ibid.). Thus the perception of an image, which can also show absent and non-existent objects, represents a boundary that cannot be crossed. However, it does not involve hiding a "real" reality, which one could approach more easily without the image, but is instead a specific mode of the constitution of reality. Images "do not merely portray what is, but provide the viewer with an interpretation by means of which that which is becomes comprehensible. In this sense images can be understood as a medium which must be seen as a virtual reality different from consciousness and the object [portrayed]" (Fellmann, 1998:193). The subject of debate is therefore not only the differentiation between an internal happening in the image and what is beyond the image, but also how the relationships between the two realms are constituted.

Film geography research touches on issues of the theory of illustration insofar as its interest in the theme of "landscape in film" addresses a specific element of the figurative image layer. Film geography's main research interest in this respect is not, however, to identify the dramatic and receptive conditions on the basis of which similarity effects come into being and "real scenes" are created. Instead, the scenario presented is understood as a kind of transformation product of a primary and specific space: "Because film locations are changed and interpreted as needed, the specific space is transformed into a secondary system of meaning. Thus a space is not authentically re-presented, instead a story is presented. Accordingly, the geography of the film world does not always correspond to the geography of the real world." (Bollhöfer, 2003:54, originally emphasized). The revelation of this dualism forces us to emphasize, perhaps especially with regard to the discourse of the media sciences (and almost 20 years after Cosgrove and Daniels), that film landscapes cannot be understood mimetically (Escher/Zimmermann, 2001:230). But what is the "geography of the film world" in relation to the "geography of the real world"?

Evidently, the question of representation is especially acute when the visuality of the image recedes into the background and the (photographic, cinematic, computersimulated) image appears to be a reproduction of the view of the unarmed eye. Especially if one assumes that similarity phenomena are relevant to communicative processes, it is essential to differentiate between the "apparent documentary fidelity of the image vouched for by technology and an appearance of truthfulness directly associated with perception" (Meder, 2006:108f.). Is it therefore necessary to distinguish between realistic and non-realistic (false?) depictions? Moreover, should the temporal modus of a primary and secondary creation of meaning be taken into account? On the contrary, should not the "secondary system of meaning" be interpreted as the primary one if one works on the basis of a constructivist theory of images? And where is the dividing line? On what theoretical concept should this be based? Could it be the question of attributed authenticity and the claims to validity inherent in the image (with regard to its truthfulness) that may lead us somewhere here? More cautious in this respect are assumptions that do not formulate reality as the coherent outward appearance of the image or the film: "We can no longer talk of film representing, or mimicking, reality, because we can no longer assume that there is a single, coherent reality waiting out there to be filmed" (Aitken/Dixon, 2006:327). This viewpoint would also open up images or films as objects of research for human geographical studies that do not focus on the image of the film itself. Whether a particular film is realistic or not, what the director wanted to communicate using his creative means and the extent to which intentions are actually identifiable, are problems in media science that do not relate solely to the analysis of the image (e.g. see Eco [1990]1998 on intentio auctoris, intentio operis, intentio lectoris). In contrast, human geography must strive to use images productively, as individual works and as a genre, for the study of the social reality of space and spatiality. Binder Johnson and Pritzl argued in this direction in the early 1980s, when they observed: "The significance of landscape art for the popularization of the sublime and sensational landscapes of the [American] west is beyond doubt" (Binder Johnson/Pritzl, 1981:219).

### 3.3 Image pragmatics

In this respect, image pragmatics provides an approach that attempts to understand the meaning of images by analysing their use in communications, analogous to Wittgenstein's philosophical studies of language. The use of images can be seen as part of communicative behaviour after Habermas (Habermas, 1995). "Meaning is not irrevocably written into singular objects, signs or images, but is constituted in different contexts of origin, use and exploitation, from which it doubtless also differs" (Schelske, 2001:151). Thus, instead of inherent meaning, the practices of image production and interpretation which create meaning are central. Contextualisation in broader behavioural contexts is a central interpretative method (Sachs-Hombach, 2006:157ff.) and is also a significant defining moment of a current image concept that must take into account the "diffusing practicalities" of the image today (Meder, 2006). In contrast to such approaches, the phenomenological theory of images insists that images should not always be treated as signs and therefore equivalent to language. This also means that the semiotic theory of images creates the problem of representationality by assuming the sign character of images, i.e. their referentiality. Thus Wiesing refers to a "semiotification of the image" (Wiesing, 2004:159). Seen from a phenomenological point of view, images exist when they are perceived as images. And this is the case when objects confront the viewer (are "presented") as something that is solely visible. This is where the difference between the artificial and the "normal", between the image as object and the subject of the image (Panofsky, Husserl) are to be seen. According to Wiesing, the advantage of such a conception lies in the opportunity it provides to understand images without a point of reference (abstract art or digital simulations) as images. However, it is not clear how "normal objects", such as geographically interesting "landscapes", can already have the character of signs and thus appear "artificial" and not "normal" to the culturally formed eye. This discussion also ultimately leads back to the problem of identifying what is "geographical" about visual material. What visual material and what "practices that generate meaning" are "geographical" and in what sense of "geography"? This does not automatically call for a definition of the subject of the discipline, but rather questions the extent to which images are, or, can be, part of the everyday making of geography and the function and meaning they have with regard to the everyday constitution of spatio-temporal reality.

#### 4 What visual material is "geographical"?

Initially it seems plausible to study cinematic geographies by looking at their use of "landscapes". If we follow Escher/Zimmermann, the systematic study of landscapes in film opens up an analytical approach to the forms and practices of localisation in film and through films. However, problems arise if we define this approach as being genuinely "geographical" on the basis of the image element "landscape", at least if a fundamentally non-essentialist perspective is applied. Not only is the picture-subject which is recognised as a landscape already presupposed as a pre-semiotic object, there is a second pre-interpretation in the assumption that it is landscape as a picture-subject that makes a film geographically interesting. The implicit assumption that the setting of a cinematic plot represents some sort of "landscape", or is decoded as such by the viewer, is however not quite as self-evident in the context of image theory discussions.

Is there any genuinely geographical visual material at all? Can images be divided into those that are geographically relevant and others? From a semiotic point of view this is hardly possible, if it is assumed that it is not the image itself but its embeddedness in a functional context and a semantic sphere that release (hermeneutic approach, contextualist arguments) or create meaning (pragmatic approach). Thus nothing is geographical per se; there is only a geographically oriented perspective on something with regard to an epistemological interest in spatial relations (in society). Geography is thereby defined – in accordance with constructivist approaches – not in terms of objects but in terms of activities. It follows that individual elements cannot be extracted as objects of a geographical image analysis. At least, not as long as a fundamental discussion of the concept of landscape (or space) takes place and an explanation is provided as to why and how landscape images constitute and structure space. Thus the recognition or categorization of the meaning of images is not founded in the signified itself but in the process of the use of signs, i.e. as an "arbitrary" unity of signifier, code and signified. Visual geographies would hence be on hand if, for instance, the unity of the sign was a "localisation" or "spatialisation". This does not resolve the problem but shifts it to the (conventionalised) use of "visual signs". Instead of an inherent significance of images the geographical image concept is then rather defined by the culturally determined and disciplined act of perceiving as well as the socio-cultural references of present and absent signifieds. One could then also ask what elements in the image trigger the interpretation of a concrete spatial localisation on the earth and what significance this localisation has for our understanding of the image or the context in which the image is used. The claim to validity inherent in the image ("this is what it looks like here!") plays a major role in this respect.

## 5 "Visual geography": position and horizons

As the discussion so far has indicated, "visual geographies" is a concept which at most describes a selective perspective on the fields of research of (human) geography. It appears difficult to use it to derive a distinct geographical subdiscipline. This would involve either a technical interpretation of such a discipline, i.e. the production of images, e.g. maps, or all work on and with images would have to be formalistically included in the area of visual geography. This, however, would require an explanation why visuality implies a genuine type of socio-spatial relations, so that "visual geography" could exist at the same level of abstraction as "political geography", "economic geography" or the geography of everyday regionalisation, for instance. Or a reifying conclusion as described above could follow: if it is space as an element in images that makes the images geographically interesting, then a constructivist-oriented human geography would expose itself to the contradiction of conceptually having to fall back on a space which has already been recognised/identified and interpreted, i.e. a space which is already given, such as "landscape". The content of visual geographies can therefore be defined with regard to the role of the visual in the study of spatial issues. That means that the inclusion of the visual in human or cultural geography must be framed in an issue that itself is not primarily centred on visuality. The theoretical basis of visual geographies should then provide opportunities for reflection on the relationship between images and space.

Human geography has difficulties with the theoretical foundation of the role of the visual in geography. Inspired by so-called "non-representational" approaches (Thrift, 1999, 2001), an aversion to such a fundamental and systematic development of theory is currently to be observed in geography in English-speaking countries. While the work of Urry (2002) reflected the visual and the formation of the (romanticising or collective) gaze, more recent cultural research tends towards a stronger rejection of the primacy of the visual and emphasises other (haptic, olfactory, auditory, emotional) sen-

sory impressions (e.g. Markwell, 2001; Wylie, 2003; Sui, 2000). In contrast, we would like to emphasise the necessity for theoretical discussion, given the increasing influence of images on everyday reality. We would start by viewing images loosely as an element of the everyday, structuring production and reproduction of socio-spatial relations. This approach is not non-representational insofar as the supposed representationality or evidential character of images is the object of critical reflection, thereby also allowing the exposure of power through images.

How could a geographical programme of research with and about images be theoretically derived? What specific aspects of the relationship between image and space could be of interest to geographers? What opportunities are there for reflection on the relationship of image, space and society from a critical, reflective perspective?

One possible research focus consists of the constitution of space through material images. It focuses the role of material visuality such as images for everyday use or advertising images in the structuring of external space – one only has to call to mind the neon signs of Times Square or the signposting of thematic walks. The associated spatial concepts are metrical with regard to the regulation of bodies, or social with regard to the structuring of publicity and privacy, of exclusion and inclusion.

Another possible focus is the constitution of space within the image, a focus that concentrates on the symbolic interior of the image. In this perspective images are seen as representations of space, which as concluded above do not automatically portray spatial objects, but may refer symbolically to socio-cultural interpretations as space (town, country, home, landscape, inside, outside, constriction, extensiveness etc.). Suitable images could be maps, landscape paintings or photomontages for advertising purposes. A further, pragmatic focus relates to spatial images as reflections of social needs and brings into focus the function of images that evoke specific interpretations of space ("natural open space"; "urban transport space") in the context of acceleration and globalisation. Where are such images used? What do they stand for? Moreover, because of their hybrid character images mediate between perceptable and perceived space. They are hence media that structure both the discursive body and the lived body. Since the practice of seeing (Schürmann, 2008) embraces semantic as well as somatic dimensions questions arise that point to a visual mediation of spatial experiences. Finally, images can be studied as elements of strategic behaviour with underlying locational logic and truth claims ("look, in this place it looks like this!") and as representations of discursively forced spatial meanings (the exotic landscape, the noble mountains, the secure residential area etc.), and mass media arguments can be exposed using such conventionalised spatial meanings. These also include stereotyped constructions of spatial identity, which could be understood via the study of ideas of man and their localisation (see Wucherpfennig et al. 2003).

A third major focus derives from the alleged documentary and informative character of "perfectly normal" everyday images for practical use, whose technical production has taken a back seat and which therefore appear to be illustrative (see Gugerli/Orland, 2002). The making visible of events that are documented in and by images/film is always associated with processes of localisation (which are admittedly sometimes quite rudimentary). The image of the event (and this also true for events that are already in the past) marks a specific location in time-space, even though it is a technical solution composed of specific time-space relations. And because images, in the form of photographs, satellite images, films and even surveillance videos, undertake this specific definition, they become guarantors of veracity. An image of a place where something is happening or has happened always appears to have a certain evidential quality, thanks to the objectivity attributed to the mediating technology. Awareness of the fact that images are in principle susceptible to manipulation is only the obverse of the belief in their character as an accurate reproduction of reality, which can in theory be criticised, but in practical terms is almost impossible to eliminate. The objectiveness and evidential nature of images, based on a constitutive analogy of perception and image (Fellmann, 1998) are (part of) practices of localisation whose social potency has hitherto been neglected by geography. Their study should focus not on an examination of individual images, but rather on the theoretically honed analysis of the "documentary politics of truth" (see Steyerl, 2004), where the image and its appropriation of space are primarily means to the end of creating evidence and legitimation. Space-image relations could thereby be discussed from the perspective of their role in the production of reality. This should lead to other possible approaches to the classification of images, i.e. a differentiation between images primarily intended to depict and those that make an issue of depiction and thus belong to a different reflective level as artistic images (see Posner/Schmauks, 1998). And does this imply that there are images of sociospatial relations that are either reflective or non-reflective in nature?

Finally, it is important to consider the ways in which the production of images, access to images and the appropriation and surveillance of space through images affects social relations and may even alter them. What purposes do images of spaces and places serve? What are their intended effects? Are there discourses that are supported by images and are there images around which discourses develop? Firstly one should bear in mind those images that have thoroughly penetrated general communication and circulate within it, as in the case of the "image icon" ("Visiotyp", see Pörksen, 1997) of the "blue planet", which is the ultimate symbol of the earth as a subjected object (see Cosgrove, 2006). A second emphasis within this field could start from the significance of image production for human behaviour and action. What is the connection between behavioural patterns and forms of visual surveillance in a huge range of places, in public squares

and transport, in nursery schools and house entrances? What forms of subjectification are created by video surveillance and to what extent do new technologies of power and new forms of governance thereby spread (see, for example, Krasmann, 2005; Jørgensen, 2005)? What does this mean in relation to places that are not subject to (visual) surveillance, what behavioural options are limited in some places and made possible in others? What practices of social selectivity are associated with this? What conceptual approaches would therefore be suitable to the study of the visual availability of spaces and places?

These are some of the questions that we believe are important in the study of the significance of images, visuality and visualisation for socio-spatial relations. They are far from having been fully answered. The questions cited above show that it is necessary to develop concepts of visualisation and definitions of images that fit social geographers' interest in the analysis of socio-spatial relations. The contributions in this thematic issue derive from a conference which was explorative in character. They represent an attempt to approach this field of research from various directions, and a wide range of different theoretical approaches and accordingly different empirical methods for the analysis of visual aspects of socio-spatial relations play a role.

#### 6 On the contributions in this thematic issue

We have argued above that a social geography approach to images initially requires an examination of the concept of the image. This is something also called for by Dirksmeier in his contribution, which discusses the use of images in empirical social geography. He recommends following Husserl and clearly distinguishes his phenomenological concept of the image from a semiotic definition. He sees the main advantage of this theoretical option in the fact that the phenomenological image theory directly relates the subject and the object of the image to each other and emphasises the artificial presence of the object of the image in the image carrier. According to Dirksmeier, this allows the "greatest possible objectification" of the researcher in the research process. The researcher can put aside his own interpretation in bringing together the subject of the image and the object of the image. Dirksmeier (2007:5) assumes that the "objectification of the subject of scientific objectification" (Bourdieu, [1991]1997:90) mediated by image theory, "which theoretically at least makes every interpretative effort by the scientist obsolete", can be useful methodologically. This starting point, in combination with considerations about "reflective photography", is used to deduce fields in which images can be used in empirical social science and in empirical social geography.

Karin Wiest experiments with the application of this type of approach in a study that examines spatial imaginings and spatialisations of social values using the example of residential areas in Leipzig. She uses images from advertising, i.e. images whose narrative structure links into fundamental human needs or is intended to transport them, and which are also highly conventionalised. Her concern is to identify the "symbolical code of space" in its social significance, and to use the example of estate agents and locational advertising to demonstrate the social attributions, linked to specific locations, that are formulated in the context of specific marketing intentions. Wiest asked her interviewees to identify associations between the advertising images and urban districts. In this way she was able to identify "supraindividual social agreements, which are woven into everyday knowledge and even stereotypical, about the status of the districts in question and their place in the cultural system" (Wiest, 2007:89).

While these contributions concentrate on identifying the potential epistemological gain from the methodical use of images, subsequent contributions examine the practices of the everyday use of images and their significance for the construction of geographies, with numerous examples provided from mass media. Although the flood of images has increased, creating the impression that this is a comparatively new phenomenon, the underlying modes of construction of geographies are certainly not new. Indeed, as Tilo Felgenhauer and Antje Schlottmann (2007) argue, this involves methods of appropriating the world that are firmly established in the "language of space" and are continually reproduced in many variations. Using the example of the (re)construction of "Mitteldeutschland" [Central Germany] by the media, they thereby break through common simplified conceptions of "the media" as actors in the production of opinions and views of the world, and turn the argument around: media portrayals often play a less active and more reactive role in the everyday production of "world-views". In many cases they simply latch on to existing models of what can be said and shown, and merely create new combinations.

Nevertheless, visual depictions are open to interested use and are therefore the subject of critical, political study. Some central questions that must be asked in this context are: "What images are produced and which ones are left out? How are these images instrumentalised and how do they serve to develop the profile of the spaces/places to which they refer?" Birgit Stöber (2007:47) poses these questions and locates them discursively in political neo-liberalism. She uses her study of the examples of "Berlin" and the "Öresund region" to provide detailed insights into different place brandings. While they are strategically planned as political processes, it is nevertheless possible to direct them to a limited extent only. Material, mental and linguistic images always contain and unfold their own realities, which evade designing and controlling intervention. It becomes clear that the relationship between image and meaning is thereby anything but trivial, whether in theoretical or practical terms. Meanings cannot be lightly read into images, and it appears equally difficult to create specific meanings (effects) using images. Images are not a reflection of reality (or realities), but interfaces of their constitution.

"Meanings" are incorporated in visual materials in the form of inherent or intrinsic "meanings", regardless of the intentions of the producers of images or the contexts in which images are consumed. This aspect forms the focus of Urs Müller and Norman Backhaus' (2007) study of the power of images in the process whereby the Entlebuch region (in the canton of Lucerne) and the Jungfrau-Aletsch-Bietschhorn region applied to become UNESCO biosphere reserves. Their contribution presents a development of analytical categories in the symbolical appropriation of space which makes it possible to use the physical image to deduce unreflected mental images and typical interpretations of images. The authors begin by supposing a fundamental differentiation between "natural" and "cultural spaces", and refine the latter by including their primary functions (work, leisure etc.). They take "living space" with a visual effect into account, as well as "space" of identification". Their analysis of the visual material using these categories illustrates the latent perceptions of a region held by both by those who produce and those who consume images. Such perceptions can drive behaviour for the very reason that they are unreflected.

The "de-bounding theorem" (Luutz, 2007:29) that underlies the studies published here as a negative or complement of the visual and linguistic production of places, is the explicit starting point of Luutz' study of images of space/place as scientific guidelines and guiding metaphors. Luutz shows that totalitarianising theories of a global society of whatever origins follow the de-bounding theorem and thereby introduce and develop a spatial theoretical language that is mostly unreflected. These spatial images are much more than merely decorative rhetoric, rather the social-ontological elements contained in spatial language contribute to the sociological construction of objects. The theoretical and time-diagnostic approaches of Ulrich Beck, Georg Simmel and Niklas Luhmann are used to discuss the spatial metaphor of sociological theoretical terminology in terms of both its enabling and its reductionist content. At the same time the author emphasises the indispensability of spatial metaphor (and that also implies: the indispensability of spatial images. His concern is not only with the appropriateness of scientific terminology. For, according to Luutz (2007:43), "conflicts over the 'right spatial images' in society [are] ... never merely an expression of the internal scientific game concerning the establishment of interpretative authority, but are always also part of the power game in society as a whole which is concerned with re-delineating the social world".

Finally, Tristan Thielmann looks at spatial concepts in the media and identifies a new type of relationship between medium and space on the basis of a study of navigation systems for motor cars. This relationship also affects the constitution of the subject who is "experiencing" space (Thielmann, 2007). Referring to the work of Virilio on "dromology", Foucault's concept of "heterotopia" and Soja's

conception of "Thirdspace", Thielmann describes navigation systems as geomedia, in which projection characteristics of cartography that are independent of the subject converge with subject-dependent virtual experiences of space through visual computer media. An important aspect of this process is the two-sidedness of the relationship of navigation system and (re)presented space. The navigation system structures the surrounding space for the viewer, either in the form of a map or a perspective projection onto the windscreen. At the same time the map or image changes in response to the movement of the viewer. Thielmann's detailed account of the development of navigation technology from this perspective clearly demonstrates that navigation systems should not be discussed as functional aids to orientation, but rather in the context of completely new types of spatial relations in society.

We hope that this thematic issue and its introductory editorial will stimulate further reflection on the relationship between images and space and encourage exploration in the field of visual geographies.

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